

IN THE CLAIMS:

Please cancel claims 1 to 61, and add the following new claims 62 to 122:

62. (New) An interactive play device for interacting between the device and the user comprising:

means for generating a plurality of interactions for providing interactive effects with the user,

a plurality of input control mechanisms for the user to interact with the device,

means for storing information related to user's responses to interactions,

means for analyzing user's responses to derive knowledge information pertaining to how the user has interacted with the device, and

means for controlling the device to operate in a distinctive manner that is different from the operation of a similar device with a different knowledge information.

63. (New) An interactive play device as recited in claim 62 further comprising a housing.

64. (New) An interactive play device as recited in claim 62, wherein said means for analyzing user's responses includes defining normal responses to interactions.

65. (New) An interactive play device as recited in claim 63 wherein said housing is in the form of a doll, animal, action figure, story or fairytale character, historic character, monster character, alien or extraterrestrial character, heroic character, religious character, movie or television character, or cartoon character.

66. (New) An interactive play device as recited in claim 62 wherein said means for controlling the device to operate in a distinctive manner includes predefining a plurality of operating states, and selecting an operating state based on how the user has interacted with the device.

67. (New) An interactive play device as recited in claim 66 wherein during said plurality of operating states the device mimics human-like behavior.

68. (New) An interactive play device as recited in claim 67 wherein said plurality of operating states that mimic human behavior includes at least one of happy, playful, sad, angry, and surprised states.

69. (New) An interactive play device as recited in claim 63 wherein said housing is in the form of a car, truck, van, motorcycle, military tank, train, ship or plane.

70. (New) An interactive play device as recited in claim 62 wherein said means for analyzing user's responses includes a comparison of actual user's responses to predefined anticipated responses.

71. (New) An interactive play device as recited in claim 62 wherein said means for analyzing user's responses includes determining the confidence levels associated with user's responses to interactions.

72. (New) An interactive play device as recited in claim 71 wherein the confidence level associated with a particular user's response to an interaction is based on the frequency of occurrence of said response.

73. (New) An interactive play device as recited in claim 62 wherein said means for controlling the device to operate in a distinctive manner includes random elements.

74. (New) An interactive play device as recited in claim 62 wherein said means for generate a plurality of interactions includes at least one of means for generating verbal communications, and means for generating visual communications.

75. (New) An interactive play device as recited in claim 74 wherein said visual communication is implemented using at least one of Liquid Crystal Display, a CRT display, and light emitting means.

76. (New) An interactive play device as recited in claim 62 wherein said plurality of input control mechanisms includes at least one of computer keyboard, touch screen controls, and a computer mouse with associated controls.

77. (New) An interactive play device as recited in claim 63 wherein said plurality of input control mechanisms includes at least one of a switch, a pressure switch, a magnetic sensor, a light activated sensor, a sound activated sensor, a voice recognition module, a switch on a

remote control apparatus, an accessory that can be plugged into the device, and a proximity sensor.

78. (New) An interactive play device for interacting between the device and the user comprising:

a housing,

a microprocessor with a computer-readable medium encoded with a computer program to control the operation of the device,

a computer program segment that generates a plurality of interactions for providing interactive effects with the user,

at least one of a switch, a pressure switch, a sound activated sensor, a voice activated module, a speech recognition module, a magnetic sensor, a light activated sensor, a magnetic sensor, a proximity sensor, a switch on a remote control apparatus, and an accessory that can be plugged into the device to enable a user to interact with the device,

computer memory to store information related to user's responses to interactions,

a computer program segment that processes user's responses to derive knowledge information pertaining to how the user has interacted with the device, and

a computer program segment that employs said knowledge information to control the device to operate in a distinct manner that is different from the operation of a similar device with a different knowledge information.

79. (New) An interactive play device as recited in claim 78, wherein said computer program segment that derives knowledge information includes a comparison of actual user's responses to predefined anticipated responses to interactions.

80. (New) An interactive play device as recited in claim 78 wherein said housing is in the form of a doll, animal, action figure, story or fairytale character, historic character, monster character, alien or extraterrestrial character, heroic character, religious character, movie or television character, or cartoon character.

81. (New) An interactive play device as recited in claim 78 wherein said computer program segment that controls the device to operate in a distinct manner includes predefining a

plurality of operating states, and selecting an operating state based on how the user has interacted with the device.

82. (New) An interactive play device as recited in claim 81 wherein during said plurality of operating states the device mimics human-like behavior.

83. (New) An interactive play device as recited in claim 82 wherein said plurality of operating states that mimic human behavior includes at least one of happy, playful sad, angry, and surprised states.

84. (New) An interactive play device as recited in claim 78 wherein said housing is in the form of a car, truck, van, motorcycle, military tank, train, ship or plane.

85. (New) An interactive play device as recited in claim 78 wherein said computer program segment that derives knowledge information includes determining the confidence levels associated with user's responses to interactions.

86. (New) An interactive play device as recited in claim 85 wherein the confidence level associated with a particular user's response to an interaction is based on the frequency of occurrence of said response.

87. (New) An interactive play device as recited in claim 78 wherein said computer program segment that controls the device to operate in a distinctive manner includes random elements.

88. (New) An interactive play device as recited in claim 78 wherein said computer program segment that generates a plurality of interactions includes at least one of a control logic that generates verbal communications, and a control logic that generates visual communications.

89. (New) An interactive play device as recited in claim 88 wherein said visual communication is implemented using at least one of Liquid Crystal Display, a CRT display, and light emitting means.

90. (New) An interactive play device as recited in claim 78 wherein said interactive effects include replies by the device responsive to the activation of input control mechanisms by the user.

91. (New) An interactive play device for interacting between the device and the user comprising:

a microprocessor with a computer-readable medium encoded with a computer program to control the operation of the device,

a computer program segment that generates a plurality of interactions for providing interactive effects with the user,

a plurality of input control mechanisms for the player to interact with the device,

computer memory to store information related to how the user has interacted with the device,

a computer program segment that derives knowledge information pertaining to the user's interactions with the device, and

a computer program segment that processes said knowledge information to provide an autonomous operation of the device that includes at least one of generating unplanned interactions, generating unstructured interactions, and controlling the device to operate in a distinct manner that is different from the operation of a similar device with a different knowledge information.

92. (New) An interactive play device as recited in claim 91 further comprising a housing.

93. (New) An interactive play device as recited in claim 91, wherein said computer program segment that provides autonomous operation includes defining normal responses to interactions.

94. (New) An interactive play device as recited in claim 92 wherein said housing is in the form of a doll, animal, action figure, story or fairytale character, historic character, monster character, alien or extraterrestrial character, heroic character, religious character, movie or television character, or cartoon character.

95. (New) An interactive play device as recited in claim 91 wherein said computer program segment that provides autonomous operation includes predefining a plurality of

operating states for the device, and selecting an operating state based on how the user has interacted with the device.

96. (New) An interactive play device as recited in claim 91 wherein during said autonomous operation the device mimics human-like behavior.

97. (New) An interactive play device as recited in claim 96 wherein said human like behavior includes at least one of happy, playful, sad, angry, and surprised.

98. (New) An interactive play device as recited in claim 92 wherein said housing is in the form of a car, truck, van, motorcycle, military tank, train, ship or plane.

99. (New) An interactive play device as recited in claim 91 wherein said computer program segment that provides autonomous operation includes a comparison of actual user's responses to predefined anticipated responses to interactions.

100. (New) An interactive play device as recited in claim 91 wherein said computer program segment that provides autonomous operation includes determining the confidence levels associated with user's responses to interactions.

101. (New) An interactive play device as recited in claim 100 wherein the confidence level associated with a particular user's response to an interaction is based on the frequency of occurrence of said response.

102. (New) An interactive play device as recited in claim 91 wherein said computer program segment that provides autonomous operation includes random elements.

103. (New) An interactive play device as recited in claim 91 wherein said plurality of input control mechanisms includes at least one of computer keyboard, touch screen controls, and a computer mouse with associated controls.

104. (New) An interactive play device as recited in claim 92 wherein said plurality of input control mechanisms includes at least one of at least one of a switch, a pressure switch, a magnetic sensor, a sound activated sensor, a voice activated module, a speech recognition module, a light activated sensor, a magnetic sensor, a proximity sensor, a switch located on a remote control apparatus, and an accessory that can be plugged into the device.

105. (New) An interactive play device as recited in claim 91 further comprising a computer program segment that modifies said knowledge information related to user's interactions with the device.

106. (New) An interactive play device that provides interactive effects with the user comprising:

A housing,

at least one of a switch, a pressure switch, a sound activated sensor, a voice activated module, a magnetic sensor, a speech recognition module, a light activated sensor, a magnetic sensor, a proximity sensor, a switch on a remote control apparatus, and an accessory that can be plugged into the device to enable a user to interact with the device,

a microprocessor with a computer-readable medium encoded with a computer program to control the operation of the device,

a computer program segment that generates a plurality of interactions for providing interactive effects with the user that includes at least one of verbal request, movement, facial expression, visual effect, and sound effect,

computer memory to store information related to user's interaction with the device,

a computer program segment that derives knowledge information related to how the user has interacted with the device, and

a computer program segment that employs said knowledge information to generate at least one of original interaction, distinct interaction, unpredictable interaction, variable interaction, unscheduled interaction, spontaneous interaction, unstructured interaction, and unplanned interaction, in order to provide autonomous operation of the device.

107. (New) An interactive play device as recited in claim 106 wherein said housing is in the form of a doll, animal, action figure, story or fairytale character, historic character, monster character, alien or extraterrestrial character, heroic character, religious character, movie or television character, or cartoon character.

108. (New) An interactive play device as recited in claim 106 wherein said housing is in the form of a car, truck, van, motorcycle, military tank, train, ship or plane.

109. (New) An interactive play device as recited in claim 107 wherein during said autonomous operation the device mimics human-like behavior.

110. (New) An interactive play device as recited in claim 109 wherein said human-like behavior includes at least one of happy, playful, sad, angry, amused, joyful, and surprised.

111. (New) An interactive play device as recited in claim 108 wherein during said autonomous operation the device mimics android behavior.

112. (New) An interactive play device as recited in claim 111 wherein said android behavior includes at least one of amused, annoyed, grumpy, alert, refuse and surprised.

113. (New) An interactive play device as recited in claim 63 further comprising means to communicate with a similar device.

114. (New) An interactive play device as recited in claim 92, further comprising a computer program segment to generate a plurality of interactions for providing interactive effects with a similar device.

115. (New) An interactive play device as recited in claim 106, further comprising a computer program segment to generate a plurality of interactions for providing interactive effects with a similar device.

116. (New) An interactive play device for interacting between the device and the user comprising:

A housing,

a microprocessor with a computer-readable medium encoded with a computer program to control the operation of the device,

a computer program segment that generates a plurality of interactions for providing interactive effects with the user,

a data section in said computer program that includes pre-defined anticipated responses to interactions,

at least one of a pressure switch, touch switch, magnetic sensor, light sensor, sound sensor, voice recognition module, proximity detector, speech recognition module, push

button located on a remote control apparatus, and an accessory that can be plugged into the device, to enable the user to interact with the device,

computer memory to store user's responses to interactions,

a computer program segment that derives knowledge information related to how the user has interacted with the device, and

a computer program segment that controls the device to operate in a distinct manner that is different from the operation of a similar device with a different knowledge information, using at least one of comparing stored user's responses with said predefined anticipated responses, random elements, and establishing confidence levels associated with user's responses to interactions based on the frequency of occurrences of said responses.

117. (New) An interactive play device as recited in claim 116 wherein said housing is in the form of a doll, animal, action figure, story or fairytale character, historic character, monster character, alien or extraterrestrial character, heroic character, religious character, movie or television character, or cartoon character.

118. (New) An interactive play device as recited in claim 116, wherein said housing is in the form of a car, truck, van, motorcycle, military tank, train, ship or plane.

119. (New) An interactive play device for interacting between the device and the user comprising:

A housing,

a microprocessor with a computer-readable medium encoded with a computer program to control the operation of the device,

a computer program segment that generates a plurality of interactions for providing interactive effects with the user,

at least one of a pressure switch, touch switch, magnetic sensor, light sensor, sound sensor, voice recognition module, proximity detector, speech recognition module, push button located on a remote control apparatus, and an accessory that can be plugged into the device, to enable the user to interact with the device,

computer memory to store user's responses to interactions,

a computer program segment that derives knowledge information related to how the user has interacted with the device, and

a computer program segment that defines a plurality of operating states, and selects an operating state based on said knowledge information in order to control the device to operate in a distinct manner that is different from the operation of a similar device with a different knowledge information.

120. (New) An interactive play device as recited in claim 119 having a body in the form of a human child with a translucent outer surface or skin, further comprising a plurality of light emitting diodes mounted inside the doll's body to provide a plurality of skin color effects for the doll, and wherein a first skin color effect corresponds to one operating state, and a second skin color effect corresponds to a second operating state.

121. (New) An interactive play device as recited in claim 119, further comprising a computer program segment to transform the device from an initial state to a desired state based on derived knowledge information.

122. (New) A method for an interactive play device for interacting between the device and the user, having the steps of:

generating a plurality of interactions for providing interactive effects with the user,

storing user's responses to interactions,

processing stored user's responses to derive knowledge information related to how the user has interacted with the device, and

employing said derived knowledge information to operate the device in a distinct manner that is different from the operation of a similar device with different knowledge information.